

PEOPLE'S WELDING SUPPLY -- GHG REFRIGERANT- 12 SUBSTITUTE (R- 406A)  
MATERIAL SAFETY DATA SHEET  
NSN: 683000N068518  
Manufacturer's CAGE: PEPLS  
Part No. Indicator: A  
Part Number/Trade Name: GHG REFRIGERANT- 12 SUBSTITUTE (R- 406A)

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General Information

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Company's Name: PEOPLE'S WELDING SUPPLY INC  
Company's Street: 426 BROWN ST LEVEE  
Company's City: W LAFAYETTE  
Company's State: IN  
Company's Country: US  
Company's Zip Code: 47906  
Company's Emerg Ph #: 317-463-2672; 800-535-5053  
Company's Info Ph #: 317-743-3839  
Record No. For Safety Entry: 001  
Tot Safety Entries This Stk#: 001  
Status: SMJ  
Date MSDS Prepared: 15NOV94  
Safety Data Review Date: 12JAN96  
MSDS Preparer's Name: GEORGE GOBIE  
Preparer's Company: SAME  
MSDS Serial Number: CBHXT

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Ingredients/Identity Information

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Proprietary: NO  
Ingredient: PROPANE, 2-METHYL-; (ISOBUTANE)  
Ingredient Sequence Number: 01  
NIOSH (RTECS) Number: TZ4300000  
CAS Number: 75-28-5  
OSHA PEL: N/K (FP N)  
ACGIH TLV: N/K (FP N)

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Proprietary: NO  
Ingredient: ETHANE, 1-CHLORO- 1, 1-DIFLUORO; (1-CHLORO- 1, 1DIFLUOROETHANE)  
(SARA 313)  
Ingredient Sequence Number: 02  
NIOSH (RTECS) Number: KH7650000  
CAS Number: 75-68-3  
OSHA PEL: N/K (FP N)  
ACGIH TLV: N/K (FP N)

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Proprietary: NO  
Ingredient: METHANE, CHLORODIFLUORO-; (CHLORODIFLUOROMETHANE) (SARA 313)  
(CERCLA)  
Ingredient Sequence Number: 03  
NIOSH (RTECS) Number: PA6390000  
CAS Number: 75-45-6  
OSHA PEL: 1000 PPM  
ACGIH TLV: 1000 PPM

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Proprietary: NO  
Ingredient: FIRE FIGHT PROC: FLAM IF MIXED W/LG QTYS OF AIR @ GREATER THAN  
ATM PRESS. IF CYLS OF PROD HAVE BEEN LEAKING (VAP (ING 5)

**Ingredient Sequence Number: 04**  
**NIOSH (RTECS) Number: 9999999ZZ**  
**OSHA PEL: NOT APPLICABLE**  
**ACGIH TLV: NOT APPLICABLE**

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**Proprietary: NO**  
**Ingredient: ING 4: LEAK), REMAINING PROD MAY BECOME WEAKLY FLAM HEAT OF COMBUST IS AROUND 1/10 OF THAT OF HYDROCARB GASES, (NG 6)**  
**Ingredient Sequence Number: 05**  
**NIOSH (RTECS) Number: 9999999ZZ**  
**OSHA PEL: NOT APPLICABLE**  
**ACGIH TLV: NOT APPLICABLE**

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**Proprietary: NO**  
**Ingredient: ING 5: BUT NO FL PT. CYLS OF USED REFRIGERANT, MAY CNTN LG AMTS OF REFRIGERATION (MINERAL) OIL. LIQ LEAK/CYL (ING 7)**  
**Ingredient Sequence Number: 06**  
**NIOSH (RTECS) Number: 9999999ZZ**  
**OSHA PEL: NOT APPLICABLE**  
**ACGIH TLV: NOT APPLICABLE**

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**Proprietary: NO**  
**Ingredient: ING 6: VENTING IN FIRE WILL BRING OUT CLOUD OF OIL MIST. THIS OIL MIST IS VERY FLAM (IN THE ORDER OF GASOLINE).**  
**Ingredient Sequence Number: 07**  
**NIOSH (RTECS) Number: 9999999ZZ**  
**OSHA PEL: NOT APPLICABLE**  
**ACGIH TLV: NOT APPLICABLE**

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**Proprietary: NO**  
**Ingredient: EFTS OF OVEREXP: SENSIT TO EPINEPHRINE HAS BEEN OBSERVED @ CONCS OF 50,000 PPM CHLOROFLUOROCARBON (CFC) MATLS (ING 9)**  
**Ingredient Sequence Number: 08**  
**NIOSH (RTECS) Number: 9999999ZZ**  
**OSHA PEL: NOT APPLICABLE**  
**ACGIH TLV: NOT APPLICABLE**

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**Proprietary: NO**  
**Ingredient: ING 8: HAVE PRDCED SENSIT OF MYOCARDIUM TO EPINEPHRINE IN LAB ANIMALS & COULD HAVE SIMILAR EFT IN HUMANS. (ING 10)**  
**Ingredient Sequence Number: 09**  
**NIOSH (RTECS) Number: 9999999ZZ**  
**OSHA PEL: NOT APPLICABLE**  
**ACGIH TLV: NOT APPLICABLE**

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**Proprietary: NO**  
**Ingredient: ING 9: ADRENOMIMETICS (I. E., EPINEPHRINE) MAY BE CONTRA-INDICATED EXCEPT FOR LIFE SUSTAINING USES IN HUMANS (ING 11)**  
**Ingredient Sequence Number: 10**  
**NIOSH (RTECS) Number: 9999999ZZ**  
**OSHA PEL: NOT APPLICABLE**  
**ACGIH TLV: NOT APPLICABLE**

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**Proprietary: NO**  
**Ingredient: ING 10: ACUTELY OR CHRONICALLY EXPOSED TO CFCS (FP N).**  
**Ingredient Sequence Number: 11**  
**NIOSH (RTECS) Number: 9999999ZZ**

OSHA PEL: NOT APPLICABLE  
ACGIH TLV: NOT APPLICABLE

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Proprietary: NO

Ingredient: FIRST AID PROC: PHYSICIAN. SKIN: FLUSH WITH WATER, WARM SLOWLY  
(COOL WATER) IF FROSTBITE. CALL A PHYSICIAN.

Ingredient Sequence Number: 12

NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE

ACGIH TLV: NOT APPLICABLE

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#### Physical /Chemical Characteristics

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Appearance And Odor: COLORLESS LIQUIFIED GAS WITH FAINT ETHERAL ODOR.

Boiling Point: -26F, -32C

Vapor Pressure (MM Hg/70 F): 95PSIA@70F

Vapor Density (Air=1): SUPP DATA

Solubility In Water: SLIGHT

Percent Volatiles By Volume: 100

pH: NEUT

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#### Fire and Explosion Hazard Data

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Flash Point: NONE

Extinguishing Media: WATER SPRAY.

Special Fire Fighting Proc: WEAR NIOSH/MSHA APPRVD PRESS DEMAND SCBA &  
FULL PROT EQUIP (FP N). USE WATER SPRAY TO COOL CYLS TO PVNT BURSTING/  
VENTING UNDER FIRE CNDTNS. PROD MAY BE (ING 4)

Unusual Fire And Expl Hazrds: CYLS MAY VENT OR RUPTURE IN FIRE CONDITIONS,  
LEADING TO DECOMPOSITION. THERMAL DECOMPOSITION PRODUCTS MAY INCLUDE  
FLUORIDES, CHLORIDES AND PHOSGENE (FP N).

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#### Reactivity Data

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Stability: YES

Cond To Avoid (Stability): AVOID OPEN FLAMES AND HIGH TEMPERATURES.

Materials To Avoid: STRONG OXIDANTS, INCLUDING OXYG. FRESHLY SCRAPED  
ALUMINUM, ALKALI METALS, & ALKALI EARTH METALS (SODIUM, (SUPP DATA)

Hazardous Decomp Products: MAY DECOMP @ HIGH TEMPS (>400-500F), & FROM  
CONT W/HOT METALS, HEATING ELEMENTS, PILOT LIGHTS, INTERNAL COMBUST  
(SUPDAT)

Hazardous Poly Occur: NO

Conditions To Avoid (Poly): NOT RELEVANT

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#### Health Hazard Data

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LD50- LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.

Route Of Entry - Inhalation: YES

Route Of Entry - Skin: YES

Route Of Entry - Ingestion: YES

Health Haz Acute And Chronic: INHAL: VAP IS HVR/AIR & CAN CAUSE SUFFOCATION  
BY DISPLACING OXYG AVAIL FOR BRTHG. CONT W/LIQ MAY CAUSE FROSTBITE. BRTHG  
HIGH CONC OF VAP MAY CAUSE LT HEAD, GIDD, SHORTNESS OF BRTH & MAY LEAD TO  
NARCOS, CARDIAC IRREGS, UNCON/DEATH. MAY CAUSE EYE IRRIT. ISOBUTANE: HUMANS  
EXPOSED TO ISOBUTANE 500 PPM, 8 (EFTS OF OVEREXP)

Carcinogeni ci ty - NTP: NO

Carcinogeni ci ty - IARC: NO

**Carcinogeni city - OSHA: NO**

**Explanation Carcinogeni city: NOT RELEVANT**

**Signs/Symptoms Of Overexp: HLTH HAZS: HRS/DAY, 5 DAYS/WEEK FOR 4 WEEKS, SHOWED NO CARDIAC PULM/OTHER FUNCTIONAL ABNORMS. CHLORODIFLUOROMETHANE: LOW IN TOX @ CONC AS HIGH AS 4% (40,000 PPM). NARCOTIC EFTS HAVE BEEN SEEN @ 200,000 PPM HEART EFFICIENCY (ANIMAL STUDIES) HAS BEEN REPORTED TO BE REDUCED @ CONCS OF OVER 25,000 PPM CARDIAC (ING 8)**

**Med Cond Aggravated By Exp: NONE SPECIFIED BY MANUFACTURER.**

**Emergency/First Aid Proc: INGEST: CALL MD IMMED (FP N). INHAL: REMOVE TO FRESH AIR, CALL MD. IF NOT BRTHG, GIVE ARTF RESP. IF BRTHG IS DFCLT, GIVE OXYG. DO NOT GIVE EPINEPHRINE/SIMILAR DRUGS. NOTES TO MD: BECAUSE OF POSS INCR RISK/ELICITING CARDIAC DYSRHYTHMIAS, CATECHOLAMINE DRUGS, SUCH AS EPINEPHRINE, SHOULD BE CONSIDERED ONLY AS LAST RESORT IN LIFE THREATENING EMERS. EYES: FLUSH IMMED W/WATER FOR @ LST 15 MIN. CALL (ING 12)**

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#### Precautions for Safe Handling and Use

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**Steps If Matl Released/Spill: USING NIOSH/MSHA APPRVD SELF-CNTND AIR SUPPLY & FROSTBITE PROT, PERS SHOULD ATTEMPT TO CLOSE VALVE/REPAIR SOURCE OF LEAK IF IT IS SFLY POSS TO DO SO. IF LG QTY IS RELS, EVACUATE PERS, & ALLOW TO DISSIPATE.**

**Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.**

**Waste Disposal Method: DISPOSAL MUST BE I/A/W FEDERAL, STATE & LOCAL REGULATIONS (FP N).**

**Precautions- Handling/Storing: NONE SPECIFIED BY MANUFACTURER.**

**Other Precautions: NO SMOKING IN AREA OF USE. DO NOT USE IN GENERAL VICINITY OF ARC WELDING, OPEN FLAMES OR HOT SURFACES. HEAT AND/OR UV RADIATION MAY CAUSE THE FORMATION OF CHLORIDES, FLUORIDES OR PHOSGENE (FP N).**

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#### Control Measures

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**Respiratory Protection: USE NIOSH/MSHA APPROVED RESPIRATOR APPROPRIATE FOR EXPOSURE OF CONCERN (FP N).**

**Ventilation: NONE SPECIFIED BY MANUFACTURER.**

**Protective Gloves: IMPERVIOUS GLOVES (FP N).**

**Eye Protection: ANSI APPROVED CHEM WORKERS GOGGS (FP N).**

**Other Protective Equipment: ANSI APPROVED EMERGENCY EYE WASH AND DELUGE SHOWER (FP N).**

**Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.**

**Suppl. Safety & Health Data: MATLS TO AVOID: MAGNESIUM, ETC.), MAY CAUSE EXOTHERMIC RXN. ALUMINUM IN REFRIGERATION SYS CNTNS AN OXIDE/CHLORIDE COATING SO IT DOES NOT REACT. HAZ DECOMP PRODS: ENGINES, & OPEN FLAMES. DECOMP PRODS MAY INCLUDE HYDROFLUORIC & HYDROCHLORIC ACIDS, CHLORINE, FLUORINE, POSS PHOSGENE, CARBON DIOXIDE & MONOXIDE.**

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#### Transportation Data

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#### Disposal Data

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#### Label Data

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**Label Required: YES**

**Technical Review Date: 12JAN96**

**Label Status: G**

**Common Name: GHG REFRIGERANT- 12 SUBSTITUTE (R- 406A)**

**Chronic Hazard: YES**

**Signal Word: WARNING!**

**Acute Health Hazard-Moderate: X**

**Contact Hazard-Slight: X**

**Fire Hazard-None: X**

**Reactivity Hazard-None: X**

**Special Hazard Precautions: ACUTE: INHALATION OF VAPORS MAY CONTRIBUTE TO THE OCCURRENCE OF IRREGULAR HEARTBEAT (FP N). INHALATION: VAPOR IS HEAVIER THAN AIR AND CAN CAUSE SUFFOCATION BY DISPLACING OXYGEN AVAILABLE FOR BREATHING. CONTACT WITH LIQUID MAY CAUSE FROSTBITE. BREATHING HIGH CONCENTRATION OF VAPOR MAY CAUSE LIGHT HEADEDNESS, GIDDINESS, SHORTNESS OF BREATH AND MAY LEAD TO NARCOSIS, CARDIAC IRREGULARITIES, UNCONSCIOUSNESS OR DEATH. MAY CAUSE EYE IRRITATION. CHRONIC: NONE SPECIFIED BY MANUFACTURER.**

**Protect Eye: Y**

**Protect Skin: Y**

**Protect Respiratory: Y**

**Label Name: PEOPLE'S WELDING SUPPLY INC**

**Label Street: 426 BROWN ST LEVEE**

**Label City: W LAFAYETTE**

**Label State: IN**

**Label Zip Code: 47906**

**Label Country: US**

**Label Emergency Number: 317- 463- 2672; 800- 535- 5053**